Energy Research & Social Science 41 (2018) 168–175

Contents lists available at ScienceDirect

Energy Research & Social Science

journal homepage: www.elsevier.com/locate/erss

Original research article

‘Our energy, our rights’: National extraction legacies and contested energy justice futures in Bangladesh

Heather Plumridge Bedi

Dickinson College, 28 N College St, Carlisle, PA 17013, USA

ARTICLE INFO

Keywords:
Bangladesh
Coal
Energy justice
Activism
Climate change

ABSTRACT

Energy poverty remains an enduring challenge in Bangladesh, with 41 million people lacking electricity. Foreign states, corporations, and financial institutions have historically shaped the form and terms of the country’s energy system, which is predominantly fossil fuel based. Shifting geographies of energy extraction and processing continue to reflect this past and influence current national energy debates in Bangladesh. The Rampal coal-fired energy project, a joint initiative with India, exemplifies these tensions. Opposition to the Rampal plant, proposed in the ecologically sensitive Sundarbans region, and other controversial energy extraction and processing projects led some activists and impacted stakeholders to promote the idea of “our energy, our rights.” The articulation of an energy rights discourse asserts that Bangladesh should extract and control national energy resources in a manner that respects rights and provides the basis for analyzing the energy justice landscape in the nation and beyond. The rights discourse rejects the nation’s legacy of poor energy decisions, and the associated realities of energy poverty. Contributing to emerging ideas around the geographies of energy justice, this research paper explores the practical application by activists and stakeholders of rights discourses to contested energy projects in Bangladesh. It shows how distributional energy justice activism critiques the historical political economy of economic liberalization and energy exploitation in the country and centers the rights concerns of energy poverty while also considering climate change vulnerabilities.

1. Introduction

> “Since it is a matter of national sovereignty, what can be done by Bangladesh to control its fuels? We all know that the structure of countries like Bangladesh is really weak, and of course corrupted. The government does not depend on the country’s people. Even, the opposition party depends on the foreign or other factors except people’s support. Hence, the foreign corporations get their chance to enter the country” (*Saki*, participant in BRAC Workshop 2015)

> “Human rights versus environmental rights (*adhikar*[1]). [The two] have to be seen as connected and not one or the other. They cannot be separated” (Rampal area resident, 2015).

> “There are many alternatives for power generation, but there is no alternative for the Sundarbans” (*Mustafa*, participant in BRAC Workshop 2015)

The proposed Rampal coal-fired thermal plant is a 1320 MW facility being constructed next to the world’s largest mangrove forest in the United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage Sundarbans eco-region in the south of Bangladesh. It exemplifies the contested nature of energy procurement, processing, and access in Bangladesh. In response to Rampal and other controversial energy extraction and processing projects, Bangladesh activists and communities promote the discourse of “our energy, our rights” (Rampal area activist, 2015). This approach asserts that Bangladesh should extract and control national energy resources in a manner that respects rights and claims energy as collective national resources, rather than the historical process of energy for foreign appropriation or internal domination, as noted in the activist and impacted stakeholder quotes above. Bangladesh activist demands that national systems for energy procurement be better aligned with rights mirror efforts to promote energy justice across several different spatial scales.

Notions of energy rights contest the status quo of local, national, or international domination of energy systems. Drawing from social movement contributions, geographers propose energy justice framing to explore how stakeholders and activists express and contest inequalities associated with the energy system [1,2]. Acknowledging human agency and the challenges associated with sustaining social movements over time, this framing explores how activists determine appropriate

E-mail address: bedih@dickinson.edu.

[1] The original three quotes were in Bengali and translated to English. Rights in this context is translated from the Bengali word, *adhikar*.

https://doi.org/10.1016/j.erss.2018.04.009
Received 29 June 2017; Received in revised form 30 March 2018; Accepted 5 April 2018
Available online 22 May 2018
2214-6296/ © 2018 Elsevier Ltd. All rights reserved.

forms of collective action and how they translate injustices into symbols, identities, and discourses of protest [3]. Viewing energy systems as embedded in political, social, and economic processes, an energy justice framing enables activists to craft meanings and narratives that respond to and emerge from these iterative processes, while potentially proposing alternatives ([4]: 2). The energy justice frame provides structure for investigating perceived injustices, while also questioning the costs and benefits of uneven energy processes.

With inspiration from the influential environmental justice field [5–7], energy justice examines the uneven distributional politics of energy infrastructure and access to electricity. Energy justice emphasizes efforts to ensure the equitable distribution of benefits and costs associated with energy services across and within nations [47]. Furthermore, energy justice probes where injustices occur in energy systems, and which populations are disproportionately disadvantaged by these inequities [8]. A noted area for empirical energy justice research, the distributional approach centers on injustices associated with both the siting of energy infrastructure and access to energy [8]. Distributional claims of energy injustice prove powerful tactics to garner public support to critique market-driven infrastructure pursuits [9]. This area of enquiry addresses both energy production and consumption, acknowledging that inequities can occur throughout the energy system. Achieving energy justice in this context is not only about a more equitable distribution of energy goods and bads, but also about addressing uneven electricity access.

The research represented in this paper responds to recent calls for the use of social science methods and tools, including field research and interviews, to study the multi-faceted impacts of energy extraction, processing, and access [10]. While there is a proliferation of energy justice literature focused on American or European case studies [1,11,4], the topic remains underexplored in the Bangladesh context. Contributing a new geographical perspective to this literature, this paper provides insight into the political economy of energy justice inspired by activism in Bangladesh and by drawing from the energy justice framing and distributional justice perspectives. It expands existing scholarship by exploring the intersection of energy justice and rights, and by detailing the historical and contemporary elements of Bangladesh energy access through an examination of the proposed Rampal coal plant.

This research draws from a larger project examining the political ecology of energy poverty, energy justice, and rights in communities experiencing the impacts of energy extraction and anthropogenic climate change. Ethnographic fieldwork in 2015 included interviews and participant observation in Bangladesh's capital city, Dhaka, and the area around the Rampal plant in the Khulna district. Unstructured questions were used with the acknowledgement that this approach allows respondents to bring up ideas or discourses not anticipated by the researcher, while deepening the context for the issue [12].

Interviews with fence-line stakeholders, activists, and academics illuminated historical and contemporary energy justice considerations. Those interviewed included some representatives of the broader coalition articulating energy justice concerns in Bangladesh. Key groups and parties involved in the energy struggle include, *Krishi Jomi Roksha Sangram Samity* (The Association for the Protection of Agricultural Land), the National Committee to Protect Oil, Gas, Mineral Resources, Power, and Ports (noted as the National Committee below), *Jamadir Andolan*, academics, university students, former freedom fighters (during the War of Liberation from West Pakistan), aspiring politicians, and political parties (including the Communist Party of Bangladesh, *Bangladesher Samajtantrik Dal*, Workers Party, and *Ganosanghati Andolon*). A textual analysis of historical and contemporary literature, government policies, Wiki Leaks documents, and newspaper articles complemented fieldwork. This literature contextualizes ethnographic findings in the broader political and energy landscape. Additionally, participation in a public workshop on energy concerns at BRAC University in Dhaka heightened awareness of the broader energy landscape in Bangladesh, which is vital to an understanding of the contemporary status of calls for energy justice and rights in the nation.

This paper commences with an exploration of justice framing and distributional rights in relation to energy processes. It then examines how contemporary energy extraction and processing entanglements in Bangladesh reflect a history of foreign state, corporate, and financial institution interference. The section charts how the political economy of energy exploitation and economic liberalization reveal a series of projects and programs that exacerbated the nation's limited access to affordable and consistent sources of energy. The paper then charts how activists contest the Rampal coal project as emblematic of efforts to subvert the social, environmental, and energy needs of the people of Bangladesh. The role of Bangladesh's larger neighbor, India, in the Rampal project adds regional complexity to the distributional burdens detailed nationally. In conclusion, the rights and energy poverty implications of these everyday realities provide the opportunity to explore the potential for energy justice-oriented political and activist protest.

2. Powering justice and rights

Energy challenges are multi-fold, including stakeholder exclusion from decision-making, lack of regular access to energy, exposure to the health and ecological externalities associated with the energy system and associated climate change considerations. In certain cases, individuals and communities intersectionally bear the injustice of all these challenges. Fuller and McCauley [4] detail how energy injustice frames are critical to the long-term contestation of grievances related to local and global energy extraction, processing, access, distribution, and climate change concerns. Despite the linked nature of many of these concerns, the authors note that there is little multi-scalar activism encompassing the intersectional concerns of income inequality, low carbon alternatives, and procedural and distributional equity. Given this, the case from Bangladesh detailed here is noteworthy because activists contest energy injustices from a range of scales- from critiques of persistent energy poverty, to the rejection of the ecological costs of coal mining and processing, to climate change concerns.

The articulation of rights is also fundamental to the framing of energy injustice in Bangladesh. In concert with increasing discussions on energy justice are considerations of the rights implications of energy procurement and processing [13]. The rights framework in the discourse of energy justice is multifold and a range of energy projects in Bangladesh are responsible for the denial of basic rights, while maximizing production and profit [49]. For example, energy processes may result in social, health, and environmental injustices experienced by communities in both extraction and processing sites. Energy extraction and conversion processes may enable rights violations: there are, for example, documented cases where private security firms are used to protect corporate energy investments. Drawing from an energy infrastructure case study in Ghana, Ablo and Asamoah [14] note that limited stakeholder involvement in the acquisition and compensation processes led to land disenfranchisement and associated vulnerabilities for displaced farmers.

These abuses are not foreign to Bangladesh. Gardner ([49], p. 199) details the Bibiyana natural gas extraction efforts in the Duniyapur area (eastern Bangladesh), where corporate social responsibility officers reported that "cultural awareness" might help smooth tensions in the nearby villages. Instead, the government deployed armed police forces to accompany Chevron, Unocal, and government officials who worked in the area. Community stakeholders perceived this approach as coercive and threatening. The violations of rights in regard to the relationship between companies and locals have not only become contentious, but even deadly as evidenced through the recent protests against the proposed Phulbari coal mine in northwestern Bangladesh [15].

Energy poverty and energy access, particularly in developing countries, are critical to rights. Bradbrook and Gardam ([16], p. 400)

note that, "access to energy is crucial to economic and social development and the eradication of poverty." Energy poverty may exacerbate economic inequalities, health, gender inequality, and environmental exploitation. It may derive from the unaffordability of available energy sources or the lack of basic electricity options. While energy poverty should be considered a human right towards welfare and equitable livelihoods, the source of electricity matters. This is particularly noteworthy when fossil fuel dependency may exacerbate uneven geographical climate change precarity.

The assertion of resource rights represents thorny terrain, including the absence of clear responsibilities and abilities to implement and protect these rights ([17], p. 438). Human rights frameworks are both lauded and critiqued for their individualistic focus. The United Nations notes that human rights seek to protect individual's rights in a "universal and inalienable; indivisible; interdependent and interrelated" manner [18]. The focus on the individual allows for emphasis on just societies that respect and acknowledge the individual above the broader societal interests. Bakker ([17], pp. 438–39) questions the utility of human rights as an activist tool. Noting the individualistic focus of human rights, she views the assertion of individual rights as well-suited to capitalist political economy. Further, there is an assumption that human rights equate property or access rights. In relation to water, a range of corporations adopted the human right to water, and ultimately diluted and compromised the right ([17], p. 440). The ideals of rights emerge in Bangladesh energy activism in quite a distinct form, not centered on ideas of individualism. The use of rights language reflects a broader reading of the checkered history of energy processes in Bangladesh, which notably excluded broad civil society agency in decision-making or energy access for the nation's most vulnerable.

3. Political economy of liberalization and energy

Contemporary Bangladesh faces mass energy shortages, with 41 million people lacking access to electricity [19]. While the electricity access rate increased by 15% points from 2012 to 17, the majority of Bangladeshis without electricity also live below the poverty line [19]. These disparities are concentrated in rural areas, where 23% of homes lack electricity. This power deficit constitutes energy poverty, and can have direct negative social, health, environmental, and economic consequences. With formerly vast natural gas reserves rapidly depleting, market pressures lead the nation to pursue coal and nuclear energy options to meet rising electricity demands. Mining and energy processing require significant land, with associated environmental degradation and social costs for impacted stakeholders. How Bangladesh balances these risks with the demand to alleviate energy poverty and meet food security needs will shape the nation's future.

Bangladesh's current energy challenges are best understood through the nation's history of economic liberalization, associated privatization, and agrarian transition. Following nine-months of civil unrest, genocide, and a violent struggle for liberation from Pakistan, Bangladesh emerged as an independent nation on December 16, 1971 [20]. The new nation was politically and economically unstable. Bangladesh adopted a protectionist strategy to shelter domestic industries, with high tariffs and quotas on imported goods [21]. The nation's post-independence leader, Sheikh Mujibur Rahman, did not support foreign investment and required that any permitted transnational entities give the government at least a 49% share of their earnings [22]. Individuals with limited economic experience guided the nation's transitional economy, the country progressed little in terms of economic development, and relied heavily on supplying raw material to other nations rather than manufactured goods ([49]: 66). By 1974, the Bangladesh economic system was on the brink of collapse. In the nation's 1974 famine over 1 million perished. Rice was available, but Sen [52] notes that it was not distributed in an equitable manner. On a brief visit to the country, United States Secretary of State Henry Kissinger referred to the nation-state as a "bottomless basket case," implying it would need a great deal of assistance and aid [23].

General Ziaur Rahman (Zia) came to power in 1977 through the creation of the Bangladesh Nationalist Party (BNP), expanding privatization and liberalization. Until his assassination in 1981, Zia removed taxes from imports and bolstered the private sector [49]. In 1982, General H.M. Ershad assumed power via a coup, and implemented a policy of economic liberalization in which many mills were denationalized [49]. The regimes of both Zia and Ershad witnessed the start of liberal policy and market-oriented liberalization reform, required by the International Monetary Fund and the World Bank as terms of loan agreements. The Structural Adjustment Programs included conditional loans for development, granted with the introduction of massive privatization and the blanket application of free market policies ([21], p. 326).

A 1982 World Bank Report ultimately changed the political economy of energy in Bangladesh. The report emphasized natural gas availability and abundance, stating, "[Bangladesh] has substantial economically recoverable natural gas reserves (about 10 trillion cubic feet) which at present consumption levels would last for several decades" [24]. The World Bank promoted economic strategies to encourage the, "expanded production, distribution and use of natural gas" [24]. The report further indicated that the participation of foreign energy companies was vital in these efforts [24]. This combination of the state gradually moving towards market-oriented policy combined with pressure from the World Bank to consider economic and energy extraction reforms contributed to the upsurge of liberalization of natural gas and energy [49].

In the 1990s, Bangladesh expanded externally oriented market-based policies, which made the country ideal for international oil companies and other multinational corporations. During this era, the government cut tariff rates from 350% in 1991 to 37.5% in 2000, and reduced import restrictions. A call for foreign investment and open trade justified export oriented economic liberalization policies, including: income tax rebates, duty drawbacks, lower interest rates on bank loans, tax holidays, an export credit guarantee scheme, export credit support, and the creation of Export Processing Zones [21]. Political-economic shifts toward a liberalizing market also mark the nation's agrarian transition. Arable land was rapidly converted to alternative uses, including energy systems, infrastructure, industrialization, and housing. Despite growing population numbers and high dependency on agrarian employment (3/5ths of Bangladeshi employment), current estimates put the total arable land at eight million hectares, down from nine million hectares of arable land in the 1990s ([25], p. 973). As energy demands heighten, agriculture must compete for land with energy extraction and processing projects, with extraction proponents using economic rationales to promote lucrative coal mining practices over agriculture [13].

Economic liberalization created an ideal climate for several transnational entities to invest in energy procurement in Bangladesh, with the government allowing international companies to begin natural gas exploration, extraction, and distribution. While the national energy company, Petrobangla, and the Bangladesh Petroleum Exploration and Production Company (BAPEX) still held shares in developing natural gas, the 1990s were characterized by the introduction of large, foreign companies ([26], p. 5). Due to the high demand for energy and a widening gap between supply and demand, the government further opened up natural gas and oil exploration, transmission, and distribution to the private sector. In 1993, five companies signed agreements to explore and extract natural gas in Bangladesh.[2] National PetroBangla and BAPEX maintained linkages to these larger corporations, but both saw little gains in their profits and lost control over the natural

[2] Occidental exploration of Bangladesh LTD; Occidental of Bangladesh; Cairn Energy PLC and Holland Sea Search; Rexwood Oakland; and United Meridian International Corporation [27].

resources [26].

The nation witnessed a reduction in poverty from 58.5% recorded in 1983–4 to 40% in 2005 [21]. Several human development indicators increased, and there were short-term changes in equity [22]. Despite the pretense of progress and growth, the country continued to face political corruption and class disparities. *Hartals* (strikes) and violent crimes were common events arising from tensions between the Bangladesh Nationalist Party, the Awami league, and other rising political parties. Often, access to material energy resources depended on local governments' national affiliation to the political parties in power, briberies, and nepotism [49]. Despite development on the national scale, many Bangladeshis remained without access to electricity, modern fuel, and faced food insecurities. There are also stark class differences in relation to access to electricity and back-up energy sources, which further energy and development inequalities in the country.

Economic difficulties in 1999 furthered disparities in the energy sector. The government awarded international and multinational energy corporations gas-rich blocks, and formerly national property became private property. Furthering economic difficulties, the price of natural gas in Bangladesh skyrocketed, and by the late 1990s the country purchased domestically extracted natural gas for national use from foreign companies at a rate 30-times higher than the offered price of the public-sector companies [26]. As Petrobangla purchased natural gas from international oil companies at global prices, the nation's increasing financial deficits led to a negative cash flow in the state company. In response, the World Bank and Asian Development Bank suggested Petrobangla raise the price of natural gas and export the resource [26].

The fetishization of natural gas reserves, with assertions about the resources' abundance, persisted into the 2000s, despite the dwindling availability of the reserve [28]. Although the World Bank's 1982 estimates claimed that Bangladesh had 10 trillion cubic feet of natural gas in reserve, this turned out to be a miscalculation. In 2011, a World Bank Report asserted that the nation's energy crisis was due to inadequate supplies of natural gas [53] and that the country did not have sufficient resources to meet growing energy demands. These energy disparities are evident through the power cuts, protests, and politicized nature of new energy projects. In Kansat, North-west Bangladesh, thousands of farmers protested the constant interruptions to their electricity supply, hindering their irrigation pumps and associated agrarian livelihoods. Six people were killed at the 2006 protest, and 100 were reported injured ([49], p. 12). The Kansat protest is neither an exception nor an isolated incident, but emblematic of the national power conundrum. Class inequities are linked to power cuts, with electricity access linked to bribes ([49], p.13). Out of consumers who are connected to the electricity grid, 79% experience load-shedding and 60% have low voltage supply [29].

While energy poverty is concentrated in rural areas, the nation's capital, Dhaka, also faces energy contestation. While the urban electrification rate is 90% at the household level, urban areas were not excluded from the 2007 and 2008 energy crises. This power crisis was mainly due to an imbalance in the supply of electricity. Even the densely populated Dhaka faced hours without electricity during the large-scale power outages. Gas shortages, inefficient transmissions, lack of political and environmental consensus to use other resources, and an overall lack of transparency in energy procurement processes all contributed to these power crises [50]. These crises led to questions regarding how the nation can balance energy demands with persistent energy poverty. Economic stagnation may be associated with the normalcy of power cuts in the country, leading some to question if "Bangladesh is running on empty?" [50]. Energy policy reform has not accompanied the country's rising energy needs. The country faces a shortage of energy sources to meet this growing demand and has become highly dependent on imported liquid fuel. The government subsidizes electricity, particularly for agriculture related demands [29].

In this context, proposed coal extraction and coal-based electricity generation projects represent opportunities for expanding energy procurement and processing in Bangladesh, but have met civil society opposition. Some conclude that companies, with support from government and other elites, extract coal, destroy land and carry on without proper compensation, all under the name of development and "progress" for the country (*Muhammad and Mustafa*, participants in BRAC Workshop 2015). A proposed coal mine in Phulbari, delayed since 2005, presents a cautionary tale of the potential risks associated with energy extraction. In 2005 United Kingdom based Asia Energy (now GCM Resources) proposed to extract 15 million tons of coal per year in Phulbari, an agriculturally important area in northwestern Bangladesh. The open-pit coal mine could have major implications for communities, agriculture, water, and ecosystems. The project is projected to cause the direct displacement of 40,000 people, water scarcity for 220,000 people, and the potential shipment of coal via the UNESCO World Heritage Sundarbans ecosystem to Rampal. United Nations Human Rights Special Rapporteurs strongly critique the project, highlighting how mining would cause mass displacement and threaten the right to food [13]. Further, 75–80% of the coal would be for the export market with the remainder for Bangladesh [26]. Anti-mining activists advocate for a moratorium on foreign companies, open pit coal mining, and the export of coal from the energy-scarce country ([30], p. 23). In 2006, a grassroots revolt in Phulbari turned deadly following clashes between the police and protestors. Some 50,000 community members gathered to demand that the company vacate the land. The police opened gunfire on the crowd, killing three civilians and wounding more than two hundred. The project remains on hold amidst international and domestic concerns, which heightened following the release of cables via Wikileaks that documented US Ambassador to Bangladesh involvement in pushing the project [31]. The proposed Rampal coal plant represents the tenuous nature of these energy pressures.

4. Assertion of rights: Bangladesh India Friendship Power Company

The Rampal coal fired thermal plant, proposed by the Bangladesh India Friendship Power Company, provides an entry point to examine contemporary energy justice distributional issues. The Rampal case demonstrates the contradictory nature of Bangladesh's energy conundrum, with the added complication that the project is a cross-border energy-sharing project with India. Collectively, these contexts reveal the complex layers of demand, political and diplomatic maneuverings, and social-environmental costs associated with energy processes. Established in 2012, the Bangladesh India Friendship Power Company (BIFPC) is a joint venture between the Bangladesh Power Development Board (BPDB) and NTPC Limited of India,[3] a government-owned utility and the largest power generating company in India. The BIFPC plans to install three coal based thermal power stations, including the Rampal power plant. The Bangladesh-India Friendship Company acquired 1834 acres of shallow rivers in the Khulna District for the Rampal plant. The thermal power plant would generate 1320 MW of power to manage and meet future fuel demand, using domestic and imported coal. The 600-acre plant site is already under construction, with another 475 acres reserved for ancillary activities. If approved, coal for the plant would be transported from the Pashur river port.

Activists and stakeholders frame their Rampal criticism around connected concerns of ecological risk, livelihood loss, and climate change vulnerability. Local health risks have not featured prominently in activism. The power plant's close proximity to the Sundarbans is a point of contestation. The Rampal plant is situated 14 kilometers from the Sundarbans, the world's largest mangrove forest. The UNESCO

[3] NTPC was formerly known as the National Thermal Power Company, and adopted the current name in 2005 when the company sought to diversify its power generation portfolio.

designated Sundarbans include salt-tolerant mangrove forests and habitats for the Bengal tiger, the estuarine crocodile, and 260 bird species. The mangroves of the Sundarbans provide important breeding ecosystems for aquatic organisms, which millions of people in the region depend on for their livelihoods [32,33]. The mangrove ecosystem also protects the coast from extreme weather events linked to climate change.

The UNESCO world heritage site status prohibits industrial activities within the Sundarbans or in the buffer zone immediately outside of the site. Rampal proponents claim that there is a 10-kilometer area protecting the Sundarbans from the plant. This periphery, which is disputed locally, makes the Bangladesh-India Friendship Power Company narrowly legally compliant with the regulation regarding industrial sites and UNESCO protection. The official documents related to the plant's geographical proximity to the Sundarbans complicate local and national comprehension of the location of Rampal. There is local speculation that government statements and the Environmental Impact Assessment (EIA) are intentionally confusing to further ambiguity regarding the plant's location in relation to the Sundarbans (Dhaka activist interview, 2015).

The EIA report for Rampal asserts that the plant will not pollute the Sundarbans because the wind blows in the opposite direction. However, activists argue that the plant will present various adverse effects to the region. Activists express concern about the disproportionate distribution of environmental bads in the region around Rampal, including: dust accumulation, water pollution, disturbance to fish migration, noise pollution, carbon dioxide, and other toxic gas releases [34]. The plant would reduce the ability for livestock rearing, rice production, and fishery productivity, which are vital for local livelihoods [48]. These risks lead many to conclude that although they want an energy plant, they do not want it situated in the Sundarbans region. "There are many alternatives for power generation, but there is no alternative to the Sundarbans" [34]. French bank BNP Paribas and the Norwegian State Pension Fund declined to fund Rampal, noting environmental and social concerns related to the coal plant [35].

The World Heritage Committee of UNESCO reviewed the plant's EIA in 2014, and noted concern regarding, "the dredging of the Pashur River to facilitate the transport of coal to the plant, as well as the coal dust released into the environment during transport and transfer, are likely to adversely impact the property" [36]. They conclude that the river dredging will change the river morphology and mangrove forests, and ultimately compromise the fragile habitat for freshwater dolphins, the critically endangered Batagur turtle, and the vulnerable small-clawed otter [36]. Following the Bangladesh government's commitment to complete a Strategic Environmental Assessment and make associated project changes, UNESCO withdrew their objection to the project in 2017 [37].

In addition to ecological concerns, the Rampal case illustrates negligence of the right to decision making in relation to land acquisition and associated loss of livelihoods. To achieve the ideal of energy justice, impacted stakeholders should have control and voice regarding extraction and processing on or close to their land. In the process of land acquisition for Rampal, the company organized seven general public consultations in August 2010, November 2012, and December 2012 with members of the public invited to express their views on the proposed project and enter their input into the consultation process. During the series of consultations, the majority of landless stakeholders expressed their opposition to the project. The EIA notes that many fence-line stakeholders expressed a strong distaste for the power plant claiming, "they would lose their land – the only means of livelihood and it would be impossible for them to survive without these lands used for shrimp cultivation, they had no other resources for their survival". In fact, area residents confirmed that 452 villagers rejected the plant, while 8 supported the plan (Rampal area residents, 2015). While the overwhelming majority expressed their opposition to the plant, there was no tribunal or other official venue for people's disagreements to be taken into consideration (Rampal area residents, 2015). These realities further the distributional injustices endured by Rampal residents.

Compounding the uneven distribution of burdens, the EIA report estimated the displacement of local people and families to be about 100–150 families in the process of land acquisition. Interviews detailed differences in their experiences and accounts of displacement in the area. While some locals stated, "several women were harassed" in the periods of displacement (Rampal area resident, 2015), others claimed some were coerced into taking compensation while another interviewee said that many did not receive any form of compensation or resettlement (Rampal area resident, 2015). There is not much clarity in the specifics of the displacement of the residents of the Kajer Khoola village, but residents note trends related to intimidation. Additionally, while the project promised local jobs, farmer, fisher-people, and manual laborer stakeholders in the area lack the skills required by the construction company [38].

The Rampal project also highlights Bangladesh's climate change vulnerability. Ecological degradation and increased exposure to extreme weather events in the Sundarbans are attributed to anthropogenic climate change [38]. In coastal Bangladesh, salinity in soil increased markedly in the last twenty years, attributed to climate-induced sea level rise and cyclones [51]. The change in saline content leaves former arable land not suitable for agriculture. A respondent described how the increased salinization of former agricultural lands provides an entry point for the government to claim that the land is not productive and that industrialization is the only economically viable alternative (Dhaka activist, 2015). The Rampal EIA concludes that agriculture, including rice paddy fields in the area, sustained serious damage from tidal surges, waterlogging, and high-water salinity. In response, the government argues that industrialization is tolerable in the Khulna region due to agricultural productivity challenges. This rationalization justified the process of filling the area's wetlands with large quantities of sand dredged from riverbeds to prepare the plant's foundation. The narrative from the EIA presumes that industrialization in the form of the coal plant is appropriate for the salinized area. However, the EIA does not address how the loss of wetlands and downstream impacts on mangroves will make the coastal area more vulnerable to the future impacts of climate change.

Changes in wetlands and mangroves associated with the plant construction negatively impact the ability of fence-line stakeholders to engage in aquaculture, farming, or fishing. It is not clear if job opportunities would be available to these communities to counter current and potential loss of livelihoods. Overall, the project planning and assessments do not provide resources to compensate for the interlinked nature of resources and livelihoods in the region, which may not be fully accounted for in land valuations. One respondent stated, "simply putting a value on the land is not enough…this view negates the overall interconnectedness of the region" (Rampal area activist, 2015). Another respondent in the Khulna region noted, "the people are highly tied into the ecosystem of the Sundarbans" (Rampal area resident, 2015). In addition to loss of livelihoods, the local stakeholders will face direct air, water, and soil pollution from the plant if it becomes operational [39]. The latter concerns are not frequently noted in activism, but are significant environmental health considerations.

While much of the protest centers on concerns about livelihoods and ecosystems in the Sundarbans, some also highlight the irony of the climate vulnerable nation relying on carbon-intensive coal. During a 2016 Dhaka protest Anu Muhammad, the member secretary of the National Committee, stated that the, "number of homeless people and climate refugees will be double in Dhaka if the Rampal Power Plant is set up near the Sundarbans" [40]. The National Committee notes how the plant will threaten the livelihoods and opportunities for 500,000 local stakeholders, while making the region and country more vulnerable to natural disasters, including climate change [41]. International observers also note the climate contradictions of the project. Former US Vice President Al Gore questioned Bangladesh Prime Minister Sheikh

Hasina about the rationale for the Rampal project during a climate change panel at the World Economic Forum in 2017. Prime Minister Hasina responded that coal is required to meet the nation's increasing demand, and that the project is distant from the Sundarbans [41].

While there is an overall consensus among activists and environmentalists that people in the region suffer from energy poverty, they argue that it cannot come at a cost of rights or the environment (Rampal area and Dhaka activists, 2015). Essentially, they note how electricity access cannot replace the resources that the earth provides for free in the area. One resident asserted that the ecological well-being of the region is intrinsically linked to the rights of people to lead productive lives (Rampal area resident, 2015). Activists and residents note that the right to energy should not come at the cost of equal rights to dignity, livelihood, and safety. The majority of interview respondents wanted an electricity project to meet local and national energy demand, but noted that the project should not be in the Sundarbans. Some respondents further articulated that they did not want 'dirty' sources of energy, including coal, and instead preferred renewable energy options for the nation.

These themes permeate political discourse. Recent political candidates, including Zonayed Saki, propose a political platform around such rights. As a National Committee member and joint convener of the People's Solidarity Movement (*Ganosanghati Andolon),* Saki's left platform centers around redistributive justice and sustainable growth. While Saki's mayoral bid in a region of Dhaka was unsuccessful in 2015, the media coverage of his ideas encourages the national debate on critical energy and social justice concerns. The rise of the 'our energy, our rights' discourse reflects these considerations, while also acknowledging the role of Bangladesh's large neighbor, India, in the energy project.

4.1. Securing energy, forging friendship? Power and transboundary relations

The particular assertion of rights evident in Rampal arises from a history of skepticism about fossil fuel access, ownership, and use in Bangladesh and India. Potential rights concerns emerge from new cross-border efforts to work on power and infrastructure alliances with India, including the Rampal project. Hotly contested locally and nationally, the Rampal plant raises questions regarding what forms of energy are pursued to meet the national energy deficit, and why India pursues this venture in Bangladesh, and not in India. The environmental and rights distributional costs for Bangladesh are forefront in the opposition. Academic and National Committee member, Anu Muhammad notes that Rampal, "would lead to an environmental and humanitarian crisis in the Southwest region" [42].

The context for these contemporary energy proposals emerges from the nations' shared, and at times, turbulent past. During the 1971 Liberation War from West Pakistan, India intervened on behalf of then East Pakistan (contemporary Bangladesh) to stop the killing of civilians. Following weaponry support for West Pakistan from the United States, India ultimately received as many as ten million refugees from East Pakistan ([43], p. xxii). With some in the Indian media claiming that Bangladeshis were threatening India's "social fabric", the Indian government led a forceful effort in 1992 to round-up and deport undocumented Bangladeshis from New Delhi ([44], p. 483). Bangladeshis remain the largest migrant group in India.

Indian Prime Minister Narendra Modi emphasized the status of the India-Bangladesh relationship during his historic visit to Bangladesh in June 2015. Indian and Bangladeshi media coverage of the trip focused on the Land Boundary Agreement, two transnational bus services, a coastal shipping agreement, and other economic investments. The media celebrated the meetings between Prime Minister Modi and Bangladesh Prime Minister Sheikh Hasina as a friendly exchange of economic and political policies with Modi stating, "we will address our challenges in a spirit of friendship and from a position of mutual trust and confidence" (Modi Hasina Joint Briefing, 2015). Largely omitted from the visit was the topic of energy, with the exception of the following mentioned in a Joint Press Briefing, "the 1320 MW Rampal power project is making progress in accordance with your laws and regulation. We can do more together in power sector, here and in India" (Modi Press Briefing, 2015). The proposed project would not meet the legal requirements outlined by India's Ministry of Environment, Forests, and Climate Change, that prohibits the building of power plants within 25 kilometers of ecologically sensitive areas. Neither Modi nor Hasina made any reference to specific steps to develop the plant nor the environmental implications, and further did not indicate which country will use the electricity generated at Rampal. While specifics remain unclear, some speculate that India holds the upper hand in these engagements:

> Indian authorities were in an advantageous position as Bangladesh authorities seemed more willing to fulfill Indian agenda without proper consultation with its own people, and shy about placing concerns and matter of interest of Bangladesh on the negotiation table [42]

The cross-border Rampal initiative with India adds complexity to Bangladesh's energy and rights woes. Opposition centers on the incompatibly of coal plants with the local ecosystems, and national aspirations to move towards less polluting sources of energy. This leads some to question why the Indian government does not build the coal fired thermal plant on their soil, and send the power to Bangladesh [45]. While narratives of 'our energy, our rights' can be framed around projects for foreign interests, including the Phulbari coal mine, the Bangladesh India Friendship project deepens concerns that the future of energy in Bangladesh is shaped not by national ownership and use, but by interventions by their more powerful neighbor.

The critical role of India in the Rampal project creates a new space to assert these rights across national boundaries. A 2016 solidarity visit by Anu Muhammad to India represents efforts to advocate for energy rights across the nations. Muhammad used the trip as an opportunity to inform the Indian public about the ecological and social costs of the project, and to ask the Indian government to work on protecting the Sundarbans ecosystems and peoples across nation-states. The trip punctuated the uneven nature of the ecological, social, and climate change costs promoted by the government under the guise of increased electricity. Muhammad emphasized how, "they (Bangladesh government officials) are sacrificing national interests and awarding all the projects to foreign firms in the name of generating electricity" (Dhaka Tribune March 2016). The cross-border activism highlighted the unequal distribution of energy costs to Bangladesh, with India presumably receiving the energy benefits.

5. Energy futures in Bangladesh

Bangladesh exemplifies how emerging energy justice activists articulate a collective approach to achieving broader rights goals. Activists assert this discourse in Bangladesh using the word 'our' to frame the issue beyond the focus on the individual to collective rights. This notion of rights focuses on broader obligations as a member of civil society, and not just individualistic considerations. The ultimate goal would be participatory civil society control over energy processes, reflecting the interests of a broader range of Bangladeshis. This ideal could also be problematic, as who has the dominance and power in Bangladesh to make and implement energy decisions? The historical review demonstrates that officials traditionally made energy choices that countered domestic energy control, with major economic, social, ecological, and energy access consequences. Select Bangladeshi elites benefited from this power structure, while the majority of citizens did not receive consistent electricity or financial benefits from resource extraction.

Activists push for a new form of energy justice, moving beyond the

dominant government officials and international corporations. Their framing proposes an ideal for a self-governing energy structure, which would be affordable and appropriate for local conditions. Rejecting the historical politics of economic liberalization and energy exploitation in Bangladesh, this energy justice activism centers the rights concerns of energy poverty and ecological protection, while also considering climate change considerations. The assertion of these rights actively contests the role that Bangladeshi elites, the World Bank, foreign governments, and corporations play in shaping Bangladesh's energy landscape. These rights present the opportunity to understand them in relation to conceptualizations of a new, collective sense of 'our justice.' At this stage, what this means in practice remains unclear. One possibility could be decentralization, which could bring decision-making closer to people impacted by the social, ecological, and economic externalities associated with poor energy provision. With calls for local energy governance closer to civil society, uneven patterns of influence across class, gender, and education could permeate. The experience would likely vary greatly across geographies, dependent on the composition and authority of each energy governance body. The potential for a new governance structure to consider energy justice rights is not evident at this stage. Emerging literature on efforts to increase citizen participation in energy decision-making in 'petrodevelopmental states' could provide insights into the intersectional political and institutional support necessary to allow for the general population to influence energy infrastructure decision-making [46]. Uneven energy processes across nations reveal that it is challenging to enforce an equitable distribution of energy related costs and benefits, even when policies are in place to ensure that vulnerable communities are not disproportionately experiencing environmental and social bads [7].

Despite these limitations, the redistribution of energy choice, in relation to both infrastructure and access to energy, can provide a step towards energy justice [8]. Bangladesh explores coal extraction and thermal power plants to meet the growing demand for electricity and to diversify energy choices in the nation, with the Rampal coal plant part of their national plan. Although activists center energy poverty in their calls for justice, they don't accept any form of energy. This approach emerges from their deep and historical analysis of the political economy of energy decisions in Bangladesh. Activists highlight the ecological and livelihood costs to critique the development and electricity access arguments noted by the government. The Rampal project received strong rebuke due to the distribution of energy generation burdens on the Sundarbans region, the emphasis on fossil fuels, and the likelihood that some or all of the coal derived electricity would flow to India.

Advocacy for 'our energy, our rights' represents a sophisticated energy justice framing to counter government development claims. In contrast to most energy justice movements, activists in Bangladesh present this more holistic approach to address a range of concerns from energy poverty to climate change. As Fuller and McCauley [4] note, this form of connected activism is unusual in energy justice advocacy. Multi-scalar movements addressing a range of concerns frequently find it difficult to sustain momentum and broad support over time. The assortment of actors involved in the Bangladesh activism enable them to learn from history, and to use large-scale energy related projects to undergird their concerns about the uneven access to electricity and decision-making processes in the nation. The expansion of this energy justice frame to political discourses represents the potential for this movement to gain broader prominence, and the potentiality to center energy justice and rights in future energy and climate change decisions in Bangladesh.

Acknowledgements

This research would not have been possible without the support of Seuty Sabur and Nusrat Chowdhury. Wendy Gomez conducted excellent research work, with funding from a Dickinson College Faculty-Student Collaborative Grant. I am indebted to those in the Rampal area who demonstrated generous hospitality and agreed to be interviewed for this research. K. Mohymeen Layes provided invaluable support as a translator and research assistant. Thanks to Shamma Alam, Nusrat Chowdhury, and Kallol Mustafa for their close review of the paper. Part of the inspiration for this paper emerged from a workshop on energy and environment, co-organized with the Department of Economics and Social Science at BRAC University in Dhaka. I am grateful to the organizers and workshop speakers including: Zonayed Saki, Anu Muhammad, Abul Hassan Rubel, Kallol Mustafa, and Nusrat Chowdhury. I thank the guest editor and three anonymous reviewers for their insightful comments on this paper.

References

[1] K. Bickerstaff, G. Walker, H. Bulkeley, Energy Justice in a Changing Climate: Social Equity and Low-Carbon Energy, Zed Books Ltd., London, 2013.
[2] K. Yenneti, R. Day, Procedural (in) justice in the implementation of solar energy: the case of Charanaka solar park, Gujarat, India, Energy Policy 1 (86) (2015) 664–673.
[3] R.D. Benford, D.A. Snow, Framing processes and social movements: an overview and assessment, Annu. Rev. Sociol. 26 (1) (2000) 611–639.
[4] S. Fuller, D. McCauley, Framing energy justice: perspectives from activism and advocacy, Energy Res. Soc. Sci. 11 (2016) 1–8.
[5] R.D. Bullard, G.S. Johnson, Environmentalism and public policy: environmental justice: grassroots activism and its impact on public policy decision making, J. Soc. Issues 56 (3) (2000) 555–578.
[6] C.E. Hess, W.C. Ribeiro, Energy and environmental justice: closing the gap, Environ. Justice 9 (5) (2016) 153–158.
[7] D. Taylor, Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility, NYU Press, New York, 2014.
[8] K. Jenkins, D. McCauley, R. Heffron, H. Stephan, R. Rehner, Energy justice: a conceptual review, Energy Res. Soc. Sci. 11 (2016) 174–182.
[9] M. Finley-Brook, T. Williams, J.A.C. Sheppard, M.K. Jaromin, Injustice in mid-Atlantic midstream gas infrastructuring, Energy Res. Soc. Sci. (2018).
[10] B.K. Sovacool, What are we doing here? Analyzing fifteen years of energy scholarship and proposing a social science research agenda, Energy Res. Soc. Sci. 1 (2014) 1–29.
[11] M. Finley-Brook, E.L. Holloman, Empowering energy justice, Int. J. Environ. Res. Public Health 13 (9) (2016) 926.
[12] D. Silverman, Doing Qualitative Research, Sage, London, 2010.
[13] H.P. Bedi, Right to food: right to mine? Competing human rights claims in Bangladesh, Geoforum 59 (2015) 248–257.
[14] A.D. Ablo, K. Asamoah, Local participation, institutions and land acquisition for energy infrastructure: the case of the Atuabo gas project in Ghana, Energy Res. Soc. Sci. (2018).
[15] N. Chowdhury, Mines and signs: resource and political futures in Bangladesh, J. R. Anthropol. Inst. 22 (S1) (2016) 87–107.
[16] A.J. Bradbrook, J.G. Gardam, Placing access to energy services within a human rights framework, Hum. Rights Q. 28 (2006) 389–415.
[17] K. Bakker, The commons versus the commodity: alter-globalization, anti-privatization and the human right to water in the global south, Antipode 39 (3) (2007) 430–455.
[18] United Nations Human Rights, What Are Human Rights? (2015) http://www.ohchr.org/EN/Issues/Pages/WhatareHumanRights.aspx . (Accessed 8 July 2015).
[19] E. Hosker, Energy Access Outlook 2017: From Poverty to Prosperity, International Energy Agency, 2017.
[20] H.H. Saunders, What really happened in Bangladesh: Washington, Islamabad, and the genocide in East Pakistan, Foreign Aff. 93 (IV) (2014) 36–42.
[21] B. Nahar, M. Siriwardana, Impact of trade liberalization on poverty in Bangladesh: a quantitative assessment, South Asia Econ. J. 10 (2) (2009) 325–369.
[22] D. Lewis, Bangladesh Politics, Economy and Civil Society, Cambridge University Press, Cambridge, 2011.
[23] M. Rezaul Bari, The Basket Case, Forum, 2008 March 1. http://archive.thedailystar.net/forum/2008/march/basket.htm . (Accessed 9 July 2015).
[24] World Bank, United Nations Development Program, Bangladesh: Issues and Options in the Energy Sector, Report No 3873- BD, Report of the Joint UNDP/World Bank Energy Sector A, (1982).
[25] S. Feldman, C. Geisler, Land expropriation and displacement in Bangladesh, J. Peasant Stud. 39 (2012) 971–993.
[26] A. Muhammad, Natural resources and energy security challenging the 'resource-curse' model in Bangladesh, Econ. Polit. Wkly. 49 (2014) 4.
[27] USA International Business Publications, Bangladesh Traders Manual: Export-import, Trade, Investment, International Business Publications, Washington, D.C, 2008, pp. 120–123.
[28] N. Chowdhury, BRAC University Workshop: Energy and Environment, Contemporary Experiences in Bangladesh, Dhaka, 2015.
[29] S. Islam, M.Z.R. Khan, A review of energy sector of Bangladesh, Energy Procedia 110 (2017) 611–618.
[30] N. Chowdhury, Energy Emergency: Phulbari and Democratic Politics in Bangladesh, University of Chicago, 2012 Dissertation.
[31] F. Karim, WikiLeaks Cables: US Pushed for Reopening of Bangladesh Coal Mine, The

Guardian, 2010 December 21.
[32] Banktrack, Rampal Coal Fired Thermal Power Plant, Banktrack, 2015 March 20. http://www.banktrack.org/show/dodgydeals/rampal#tab_dodgydeals_basics . (Accessed 20 March 2015).
[33] Banktrack, Equator Principles Analysis of the Rampal Coal-Fired Power Plant, Bangladesh, Banktrack, 2015 June 10. http://www.banktrack.org/download/rampal_ep_analysis_executive_summary_pdf/rampal_ep_analysis_executive_summary.pdf . (Accessed 10 June 15).
[34] K. Mustafa, BRAC University Workshop: Energy and Environment, Contemporary Experiences in Bangladesh, Dhaka, 2015.
[35] J. Allchin, Low-Lying Bangladesh Targets Jump in Coal Use, Financial Times, 2015 December 29.
[36] United Nations Educational, Scientific, and Cultural Organization, State of Conservation, Sundarbans: Analysis and Conclusion by World Heritage Centre and the Advisory Bodies in 2014, (2014) http://whc.unesco.org/en/soc/2868 . (Accessed 20 August 2015).
[37] Daily Star, UNESCO Withdraws Objection to Rampal Power Plant near Sundarbans, (2017) July 6. http://www.thedailystar.net/environment/unesco-withdraws-objection-rampal-power-plant-construction-near-sundarbans-bangladesh-1429213 . (Accessed 20 November 2017).
[38] South Asians for Human Rights, Report of the Fact Finding Mission to Rampal, Bangladesh, South Asians for Human Rights, Sri Lanka, 2015.
[39] K.R. Smith, H. Frumkin, K. Balakrishnan, C.D. Butler, Z.A. Chafe, I. Fairlie, P. Kinney, et al., Energy and human health, Annu. Rev. Public Health 34 (2013) 159–188.
[40] Daily Star, Forty Lakh People Will Be Climate Refugees for Rampal Plant: Anu Muhammad, (2016) November 21. http://www.thedailystar.net/country/40-lakhs-people-will-be-climate-refugees-rampal-plant-anu-muhammad-1318285 . (Accessed 17 May 2017).
[41] R. Chandran, Environmentalists Slam Planned Bangladesh Power Plants near Protected Sundarbans, Thomas Reuters Foundation News, 2017 http://news.trust.org/item/20170421125253-ov5y2/ . (Accessed 17 May 2017).
[42] Daily Star, Environmentalists Urge Hasina, Modi to Shelve Rampal Power Project, Save Sundarbans, The Daily Star, 2015 June 6, http://www.thedailystar.net/backpage/shelve-rampal-power-project-save-forest-92893 . (Accessed 9 July 2015).
[43] G.J. Bass, The Blood Telegram: Nixon, Kissinger, and a Forgotten Genocide, Vintage, New York, 2013.
[44] S. Ramachandran, Operation pushback, in: M. Guhathakurta, W. van Schendel (Eds.), The Bangladesh Reader: History, Culture, Politics, Duke University Press, Durham, 2013, pp. 483–485.
[45] Z. Saki, BRAC University Workshop: Energy and Environment, Contemporary Experiences in Bangladesh, Dhaka, 2015.
[46] N. Andrews, C. Nwapi, Bringing the state back in again? The emerging developmental state in Africa's energy sector, Energy Res. Soc. Sci. (2018).
[47] D. Gullette, J. Féaux de la Croix, Mr Light and People's Everyday Energy Struggles in Central Asia and the Caucasus: An Introduction, (2014).
[48] Z. Banktrack, Equator Principles Analysis of the Rampal Coalfired Power Plant Project, Bangladesh, (2015) Accessed December 10, 2015: https://www.banktrack.org/download/rampal_equator_principles_full_analysis_pdf/rampal_equator_principles_full_analysis.pdf.
[49] K. Gardner, Discordant Development: Global Capitalism and the Struggle for Connection in Bangladesh, Pluto Press, 2012.
[50] I. Islam, Bangladesh: Running on Empty? The Daily Star, (2008) Accessed 11/18/17 https://www.thedailystar.net/news-detail-31485.
[51] G. Rabbani, A. Rahman, K. Mainuddin, Salinity-induced loss and damage to farming households in coastal Bangladesh, Int. J. Global Warming 5 (4) (2013) 400–415.
[52] A. Sen, Poverty and Famines: An Essay on Entitlement and Deprivation, Oxford University Press, 1981.
[53] World Bank, Bangladesh – Rural Electrification and Renewable Energy Development Project: Restructuring, (2011) April 12.